Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (previously presented) An apparatus comprising:

a cache manager to manage a transfer of a trace;

a first cache coupled to the cache manager to evict the trace based on a replacement mechanism; and

a second cache coupled to the cache manager to receive the evicted trace based on a first number of accesses to the trace.

2.   (previously presented) The apparatus of claim 1 wherein the cache manager comprises a usage counter to count the first number of accesses to the trace.

3.   (previously presented) The apparatus of claim 1 wherein the cache manager comprises a comparator to compare a first threshold value to the first number of accesses to the trace, the first threshold value being a first fixed number or a first dynamically adjusted number.

4.   (previously amended) The apparatus of claim 3 wherein the trace is transferred from the first cache to the second cache when the first threshold value is less than the first number of accesses to the trace.

5.   (previously presented) The apparatus of claim 3 wherein the trace is discarded from the first cache when the first threshold value is more than or equal to the first number of accesses to the trace.

6.   (previously presented) The apparatus of claim 1 further comprising a level 2 (L2) cache to receive the trace transferred from one of the first and second caches using a second number of accesses to the trace.

7.   (currently amended) ~~The~~ An apparatus ~~of claim 6~~ comprising:

a cache manager to manage a transfer of a trace;

a first cache coupled to the cache manager to evict the trace based on a replacement mechanism;

a second cache coupled to the cache manager to receive the evicted trace based on a first number of accesses to the trace; and

a level 2 (L2) cache to receive the trace transferred from one of the first and second caches using a second number of accesses to the trace;

wherein the trace is transferred from the second cache to the L2 cache when a second threshold value is less than the second number of accesses to the trace, the second threshold value being fixed or dynamically adjusted.

8.   (currently amended) The apparatus of claim [[6]] 7 wherein the trace is discarded from the second cache when a second threshold value is more than the second number of accesses to the trace, the second threshold value being a fixed number or a dynamically adjusted number.

9.   (currently amended) The apparatus of claim [[6]] 7 wherein the second number of accesses to the trace is a number of accesses to the trace counting from a time the trace first enters the first cache.

10.   (previously presented) The apparatus of claim 1 wherein the replacement mechanism is a Least Recently Used (LRU) mechanism.

11.   (previously presented) A method comprising:
managing a transfer of a trace;
evicting the trace based on a replacement mechanism using a first cache; and
receiving the evicted trace based on a first number of accesses to the trace using a second cache.

12.   (previously presented) The method of claim 11 wherein managing comprises counting the first number of accesses to the trace.

13.   (previously presented) The method of claim 11 wherein managing comprises comparing a first threshold value to the first number of accesses to the trace, the first threshold value being a first fixed number or a first dynamically adjusted number.

14.   (previously presented) The method of claim 13 wherein managing further comprises transferring the trace from the first cache to the second cache when the first threshold value is less than the first number of accesses to the trace.

15.   (previously presented) The method of claim 13 wherein managing further comprises discarding the trace from the first cache when the first threshold value is more than or equal to the first number of accesses to the trace.

16.   (previously presented) The method of claim 14 wherein managing further comprises transferring the trace from one of the first and second caches to a second level (L2) cache using a second number of accesses to the trace.

17.   (currently amended) ~~The~~ A method ~~of claim 16~~ comprising:

managing a transfer of a trace;

evicting the trace based on a replacement mechanism using a first cache; and

receiving the evicted trace based on a first number of accesses to the trace using a second cache;

wherein managing comprises transferring the trace from one of the first and second caches to a second level (L2) cache using a second number of accesses to the trace, and

wherein transferring comprises transferring the trace to the L2 cache when a second threshold value is less than a second number of accesses to the trace, the second threshold value being fixed or dynamically adjusted.

18.   (currently amended) The method of claim ~~16~~ 17 wherein transferring comprises discarding the trace when a second threshold value is more than a second number of accesses to the trace, the second threshold value being a fixed number or a dynamically adjusted number.

19.   (currently amended) The method of claim ~~16~~ 17 wherein the second number of accesses to the trace is a number of accesses to the trace counting from a time the trace first enters the first cache.

20.   (previously presented) The method of claim 11 wherein the replacement mechanism is a Least Recently Used (LRU) mechanism.

21.   (previously presented) A system comprising:

an execution unit; and

a cache unit couple to the execution unit to provide the execution unit a trace, the cache unit comprising:

a cache manager to manage a transfer of the trace,

a first cache coupled to the cache manager to evict the trace based on a replacement mechanism, and

a second cache coupled to the cache manager to receive the evicted trace based on a first number of accesses to the trace.

22.   (previously presented) The system of claim 21 wherein the cache manager comprises a usage counter to count the first number of accesses to the trace.

23.   (previously presented) The system of claim 21 wherein the cache manager comprises a comparator to compare a first threshold value to the first number of accesses to the trace, the first threshold value being a first fixed number or a first dynamically adjusted number.

24.   (previously amended) The system of claim 23 wherein the trace is transferred from the first cache to the second cache when the first threshold value is less than the first number of accesses to the trace.

25.   (previously amended) The system of claim 23 wherein the trace is discarded from the first cache when the first threshold value is more than or equal to the first number of accesses to the trace.

26.   (previously presented) The system of claim 24 wherein the cache unit further comprises a level 2 (L2) cache to receive the trace transferred from one of the first and second caches using a second number of accesses to the trace.

27.   (currently amended) ~~The~~ A system ~~of claim 26~~ comprising:

an execution unit; and

a cache unit couple to the execution unit to provide the execution unit a trace, the cache unit comprising:

>   a cache manager to manage a transfer of the trace,
>
>   a first cache coupled to the cache manager to evict the trace based on a replacement mechanism,
>
>   a second cache coupled to the cache manager to receive the evicted trace based on a first number of accesses to the trace, and
>
>   a level 2 (L2) cache to receive the trace transferred from one of the first and second caches using a second number of accesses to the trace;

wherein the trace is transferred from the second cache to the L2 cache when a second threshold value is less than the second number of accesses to the trace, the second threshold value being fixed or dynamically adjusted.

28.   (currently amended) The system of claim ~~26~~ 27 wherein the trace is discarded from the second cache when a second threshold value is more than the second number of accesses to the trace, the second threshold value being a fixed number or a dynamically adjusted number.

29.   (currently amended) The system of claim ~~26~~ 27 wherein the second number of accesses to the trace is a number of accesses to the trace counting from a time the trace first enters the first cache.

30.   (previously presented) The system of claim 21 wherein the replacement mechanism is a Least Recently Used (LRU) mechanism.